

DOCKET NO.: IBIS0056-100 (IBIS-0312)
SERIAL NO.: 09/678,434

PATENT
FILED:10/03/2000

Amendments to the specification:

Please replace the second and third full paragraphs on page 3 of the specification with the following amended paragraphs:

--In a preferred embodiment, the dispensing mechanism can reproducibly eject drops (e.g., is reproducible in volume) having a predetermined size, such as for example, about 5 microliters, about 1 microliters, about 0.5 microliters, and about 0.1microliters in size. The dispensing mechanism preferably ejects the drops cleanly and reproducibly and does not clog when left in the air for extended periods. The self-dispensing storage device or plate, with its sample, is preferably freezable to at least -20C, ideally to -80C. The self-dispensing storage device and its sample are capable is-of being thawed and then dispensed.

The storage device includes a reservoir defining a volume for holding a ~~predetermine~~ predetermined amount of a sample. The storage device is where the sample to be dispensed is stored until it is dispensed by the dispensing mechanism. The reservoir can include any suitable shape and construction, including a tube, a balloon, a well, or any other kind of reservoir or container capable of containing and holding the sample to be dispensed. The storage device may be a rigid structure or alternative, may include a collapsible structure that collapses as the sample is dispensed from it. The storage device can be made of any suitable material or may include a coating material that is compatible with the sample, including, for example, polypropylene, polystyrene, polyethylene, silicon rubber, PEEK, glass, vinyl, porcelain, metal, or the like. The sample storage device can also be made from a transparent material so that the level of the sample remaining in the sample storage device may be ascertained.—

Please replace the second paragraph on page 4 of the specification with the following amended paragraph:

--The dispenser or dispensing mechanism can include a time and pressure type dispensing mechanism, a positive displacement type dispensing mechanism, or any other suitable dispensing device capable of dispensing the sample in precise and repeatable measured amounts or volumes.

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The dispensing mechanism should be capable ~~or of~~ reproducibly dispensing the required quantity or volume of sample from the self-dispensing storage device. The life-time of the dispenser should be at least sufficient to fire enough drops to empty the well. Since the well and dispenser are preferably disposed after use, the dispenser can be made inexpensively. Preferably, the dispenser is a positive displacement type dispensing ~~mechanisms~~mechanism. A positive displacement type dispensing mechanism typically ~~include~~includes an inlet valve, an actuator, and an outlet valve. Generally, the actuator moves in one direction to draw a quantity of the sample in from the reservoir of the storage device, and moves the other direction to push the sample out a tip opening formed in a tip of the dispensing mechanism. The outlet valve prevents air from the outside from being drawn in when the actuator makes the first, or suction, move. The inlet valve prevents the sample from being pushed back into the storage device when the actuator makes the second, or discharge, move and dispenses the sample.--